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(54) **AQUEOUS DISPERSIONS OF CONTROLLED RELEASE POLYMERS AND SHELLS AND CAPSULES THEREOF**

(57) The present disclosure relates to aqueous compositions for use in the manufacture of capsule shells and capsules with a functional polymer dispersion. The present disclosure relates to aqueous compositions for use in the manufacture of capsule shells endowed with controlled release properties. The present disclosure al-

so relates to aqueous compositions for use in the manufacture of capsule shells and capsules endowed with moisture barrier properties. The present disclosure also relates to methods of manufacturing the capsule shell and capsules, and to capsule shells and capsules obtained therewith.

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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 0 648 487 A1 (SHINETSU CHEMICAL CO [JP]) 19 April 1995 (1995-04-19) * page 2, line 1 - line 16 * * page 3, line 2 - page 4, line 45 * * page 5, line 47 - line 56 * * page 6, line 55 - page 7, line 6 * * claims 1-4 *	1-6	INV. A61K47/38 A61K9/10 A61K9/48 A61J3/07
X	GB 643 853 A (LILLY CO ELI) 27 September 1950 (1950-09-27) * the whole document *	1-6	
X	GB 1 355 324 A (MIDY SA; CLAUDE R) 5 June 1974 (1974-06-05) * the whole document *	1-6	
X,D	US 4 001 211 A (SARKAR NITIS) 4 January 1977 (1977-01-04) * column 1, line 48 - column 2, line 27 * * column 7, line 49 - column 8, line 51; example 3; table 4 * * claims 1, 8, 10 *	1-3,5,6	
X	WO 2012/056321 A2 (CAPSUGEL BELGIUM NV [BE]; BENAMEUR HASSAN [FR]; CADE DOMINIQUE NICOLAS) 3 May 2012 (2012-05-03) * the whole document *	1-6	
X	US 2007/298095 A1 (NAGATA SHUNJI [JP] ET AL) 27 December 2007 (2007-12-27) * paragraph [0030] - paragraph [0053] * * examples 5, 6 * * claims 1, 7, 12-14 *	1-6	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 19 December 2018	Examiner González Ferreiro, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☒ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-6

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6

A capsule shell comprising a non-salified functional polymer and at least one processing aid.

2. claims: 8(completely); 7, 9-11, 13, 14(partially)

An aqueous composition comprising a dispersion of a non-salified functional polymer and a certain amount of a plasticizer as processing aid.

3. claims: 12(completely); 7, 9-11, 13, 14(partially)

An aqueous composition comprising a dispersion of a non-salified functional polymer and poloxamer or polyoxyethylene-polyoxypropylene-polyoxyethylene tri-block polymer as processing aid.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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